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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the U.S. Nationalization

Application of PCT/JP00/08958

Ieyasu KOBAYASHI et al.

Application No. To Be Assigned

Filed: Concurrently herewith

For: POLYESTER FILM ROLL

Attn: Application Branch

PRELIMINARY AMENDMENT

Commissioner of Patents
Washington, DC 20231

Sir:

Prior to the initial examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Please insert at page 19, after Table 1, before line 3, the following paragraph:

--These results are shown in Table 1.--

Please amend the paragraph beginning at page 24, line 17, with the following paragraph:

--A jumbo roll of a biaxially oriented film was obtained, and then slit to give a film roll by the same method as in the comparative example 5 except that the oscillation ratio was changed to 150 mm. The shape of the obtained film roll in the width direction was measured with a bulk shape measurer manufactured by Kitano Kikaku (Ltd.) by the same method as in the comparative example 5. Among the lengths of lines which were obtained by drawing a straight line between both the ends of the obtained curved line, and then vertically drawing the lines from the convex portions to the straight line, the length of the maximum convex portion was 550 μ m, and among

the lengths of lines which were also similarly obtained by vertically drawing the lines from the concave portions to the straight line, the length of the maximum concave portion was 250 μ m. After the passage of 24 hours, the film was pulled out from the film roll, and the flatness of the film was examined. Consequently, the generation of longitudinal wrinkles was slightly found out at the maximum concave portion. When the film was lightly pulled, the fine longitudinal wrinkles disappeared, and did not cause a trouble. However, the generation of Caterpillar rut-like wrinkles (slackened wrinkles) were recognized at the maximum convex portion to deteriorate the flatness of the film, and caused troubles in practical use.--

IN THE CLAIMS:

Please amend claims 3-15 as follows:

3. (Amended) The polyester film roll described in claim 1, wherein the thickness of the polyester film is not less than 0.5 μ m and not more than 20 μ m.

4. (Amended) The polyester film roll described in claim 1, wherein the degree of rolling hardness of the film roll is not less than 90 and not more than 100.

5. (Amended) The polyester film roll described in claim 1, wherein the polyester film is a film comprising polyethylene terephthalate or polyethylene 2,6-naphthalenedicarboxylate.

6. (Amended) The polyester film roll described in claim 1, wherein the difference (Rc) between the maximum value and the minimum value is not more than 300×10^{-6} m, when the roll diameters of the core are measured in the width direction of the core.

7. (Amended) The polyester film roll described in claim 1, wherein the roll shape of the core is a crown shape whose central portion is thick and whose both end portions are thin.

8. (Amended) The polyester film roll described in claim 1, wherein the core is a fiber-

reinforced plastic core.

9. (Amended) The polyester film roll described in claim 1, wherein the flexural modulus of the core in the circumferential direction is not less than 13 Gpa.

10. (Amended) The polyester film roll described in claim 1, wherein the degree of surface roughness R_{aC} of the core is not more than $0.6\mu m$.

11. (Amended) The polyester film roll described in claim 1, wherein the degree of surface hardness of the core is not less than 65 degree.

12. (Amended) The polyester film roll described in claim 1, wherein the polyester film is a film used for the support of a magnetic recording medium.

13. (Amended) The polyester film roll described in claim 12, wherein the magnetic recording medium is a digital recording method magnetic recording medium.

14. (Amended) The polyester film roll described in claim 12, wherein the magnetic recording medium is a magnetic recording medium whose magnetic layer is a ferromagnetic metal thin film layer.

15. (Amended) The polyester film roll described in claim 12, wherein the polyester film has a coating layer on the side on which the magnetic surface is disposed and the surface with the coating layer is rolled in the inner side.

IN THE ABSTRACT:

Please replace the Abstract in its entirety with the substitute Abstract below:

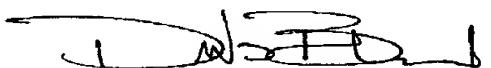
A polyester film roll is rolled on a core, wherein the difference R (m) between the

maximum value and the minimum value of the diameters of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, when the diameters of said roll are measured in the width direction of the roll, (therein, W is the width (m) of the film roll, and L is the rolled length (m) of the film roll). Alternatively, among the lengths of lines which are obtained by measuring the diameters of said roll in the width direction of the roll, drawing a straight line between both the ends of the curved line of the obtained roll diameters, the maximum distance on the convex portion between the curved and straight lines is not more than 500 μ m, and the maximum distance on the concave portion of the same is not more than 300 μ m.

REMARKS

This preliminary amendment is requested to correct minor errors in the specification, to change all multiple dependency claims to single dependency claims to reduce the initial filing fee, and to change the abstract to constitute it within 150 words. No new matter has been introduced. Entry of this amendment is respectfully requested.

Respectfully submitted,



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Date: 22 Aug - 2001

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Appendix

In accordance with 37 CFR 1.121(b)(1)(iii), the amended paragraphs are set forth in a marked-up version below:

Paragraph beginning at line 3 of page 19 has been amended as follows:

These results are shown in Table 1.

Paragraph beginning at line 17 of page 24 has been amended as follows:

A jumbo roll of a biaxially oriented film was obtained, and then slit to give a film roll by the same method as in the comparative example 5 except that the oscillation ratio was changed to 150 mm. The shape of the obtained film roll in the width direction was measured with a bulk shape measurer manufactured by Kitano Kikaku (Ltd.) by the same method as in the comparative example [1] 5. Among the lengths of lines which were obtained by drawing a straight line between both the ends of the obtained curved line, and then vertically drawing the lines from the convex portions to the straight line, the length of the maximum convex portion was 550 μ m, and among the lengths of lines which were also similarly obtained by vertically drawing the lines from the concave portions to the straight line, the length of the maximum concave portion was 250 μ m. After the passage of 24 hours, the film was pulled out from the film roll, and the flatness of the film was examined. Consequently, the generation of longitudinal wrinkles was slightly found out at the maximum concave portion. When the film was lightly pulled, the fine longitudinal wrinkles disappeared, and did not cause a trouble. However, the generation of Caterpillar rut-like wrinkles (slackened wrinkles) were recognized at the maximum convex portion to deteriorate the flatness of the film, and caused troubles in practical use.

IN THE CLAIMS:

3. The polyester film roll described in Claim 1 [or 2], wherein the thickness of the polyester film is not less than 0.5 μ m and not more than 20 μ m.

4. The polyester film roll described in [either one of] Claim[s] 1 [to 3], wherein the degree of rolling hardness of the film roll is not less than 90 and not more than 100.

5. The polyester film roll described in [either one of] Claim[s] 1 [to 4], wherein the polyester film is a film comprising polyethylene terephthalate or polyethylene 2,6-naphthalenedicarboxylate.

6. The polyester film roll described in [either one of] Claim[s] 1 [to 5], wherein the difference (Rc) between the maximum value and the minimum value is not more than 300×10^{-6} m, when the roll diameters of the core are measured in the width direction of the core.

7. The polyester film roll described in Claim 1 [or 6], wherein the roll shape of the core is a crown shape whose central portion is thick and whose both end portions are thin.

8. The polyester film roll described in Claim 1, [6 or 7], wherein the core is a fiber-reinforced plastic core.

9. The polyester film roll described in [either one of] Claim[s] 1, [6 to 8,] wherein the flexural modulus of the core in the circumferential direction is not less than 13 Gpa.

10. The polyester film roll described in [either one of] Claim[s] 1, [6 to 9,] wherein the degree of surface roughness Rac of the core is not more than $0.6 \mu\text{m}$.

11. The polyester film roll described in [either one of] Claim[s] 1, [6 to 10,] wherein the degree of surface hardness of the core is not less than 65 degree.

12. The polyester film roll described in [either one of] Claim[s] 1, [to 11,] wherein the polyester film is a film used for the support of a magnetic recording medium.

13. The polyester film roll described in Claim[s] 12, wherein the magnetic recording medium is a digital recording method magnetic recording medium.

14. The polyester film roll described in Claim 12 [or 13], wherein the magnetic recording medium is a magnetic recording medium whose magnetic layer is a ferromagnetic metal thin film layer.

15. The polyester film roll described in [either one of] Claim[s] 12 [to 14], wherein the polyester film has a coating layer on the side on which the magnetic surface is disposed and the surface with the coating layer is rolled in the inner side.

IN THE ABSTRACT:

[The polyester film roll, which is free from wrinkles and slacks generated with the passage of time and is having a good roll appearance, is provided without changing the characteristics of the film.]

[The] A polyester film roll is [a polyester film roll in which a polyester film is] rolled on a core, [characterized in that] wherein the difference R (m) between the maximum value and the minimum value of the diameters of the roll is not more than $2W \times 10^{-3}$ and not more than $L \times 10^{-7}$, when the diameters of said roll are measured in the width direction of the roll, (therein, W is the width (m) of the film roll, and L is the rolled length (m) of the film roll)[, or]. Alternatively,

[a polyester film roll in which a polyester film is rolled on a core, characterized in that,] among the lengths of lines which are obtained by measuring the diameters of said roll in the width direction of the roll, drawing a straight line between both the ends of the curved line of the obtained roll diameters, [and then vertically drawing the lines from said curved line to said straight line,] the maximum distance [length (maximum convex portion)] on the convex portion [side from] between the curved line and the [said] straight line is not more than 500 μ m, and the maximum distance [length (maximum concave portion)] on the concave portion [side from said straight line] between the same is not more than 300 μ m.